Comments Regarding The EPA Draft Outline NPRM Service Information Regulation Revisions

Submitted By The Specialty Equipment Market Association October 15, 1999

SEMA is happy to provide its comments on the draft Service Information Regulation Revisions which were presented at the SAE OBD Update TOPTEC. In general, we believe the direction which EPA has taken will be appreciated by the aftermarket industry. EPA has made a visible effort to ensure consumer choice and a competitive marketplace. While not everything needed by manufacturers of aftermarket specialty products is included (i.e., product development and recalibration capability), what is covered will significantly help reduce problems encountered in the reverse-engineering process.

The following comments are provided in the order by which each topic was covered in the referenced draft. The same section headings have been used for clarity. Areas where SEMA believes additional revision is required have been shown in italics, other areas are shown in the standard type. Headings and comments have been numbered for reference.

A) Web Site Requirements

- 1) SEMA is supportive of EPA's move toward an open-access, web-based method for information distribution. The use of manufacturer home pages is preferable to the previous Fed World site for both the reasons of greater user-friendliness and better timeliness in terms of updating of information. The use of English as the standard language and SAE J1930 terminology are also beneficial. The requirement that information be made available within 3 months of model introduction is also acceptable.
- Regarding the scope of the information, SEMA's members support the availability of enabling criteria and component operating ranges. This information will be important in attempting to demonstrate the emission compliance of aftermarket products. Additional information such as manuals, TSBs, diagnostic procedures/logic diagrams and the like will also be of great value so long as they do not require any specialized tools for access which will not be available to the aftermarket. The inclusion of training materials/courses and streaming video capability will be of particular benefit to smaller companies which lack the resources to send their technicians to training courses which may not be held locally.
- As you might expect, the area where SEMA feels the draft regulation falls short is that of recalibration information. While much has been done to provide the aftermarket with the ability to reprogram a vehicle using either an OEM or non-OEM calibration, there is no provision as to how the non-OEM calibrations are to be generated. As you know, such calibrations will likely be needed to ensure emission compliance when non-OEM parts are installed, particularly those of the add-on or modified variety. While it will still be possible to reverse engineer the raw data needed for a non-OEM calibration, the ability to reformat such data so that it is acceptable during an I/M check of the OBD system will require information to be provided from each OEM to ensure compatibility with their Calibration ID numbers, Software Verification Numbers and Checksums, etc. The draft regulations do not make mention of how this will be accomplished. SEMA requests that the

service information regulations be amended to specify that the vehicle manufacturers must make available ALL information necessary for aftermarket companies which generate their own non-OEM calibrations to allow such calibrations to be distributed, installed and verified/accepted (during an I/M check of the OBD system) with the same ease and processes which are used for OEM-generated calibrations. Failure to ensure this transparency to the technicians and the consumer will surely result in a negative backlash to OBD checks during I/M testing. Furthermore, the resultant loss of desired/compatible aftermarket products will reduce consumer choice in terms of parts and service and thus exaggerate public dissatisfaction with more stringent I/M test requirements.

- 4) Naturally, the issues of cost and timeliness are critical to the success of the proposed regulations. SEMA believes weekly updates of information should be sufficient for virtually any situation and should not be an undue burden on the OEMs. Similarly, the requirement that information be available on a per-use basis, as well as via a subscription, is also necessary. Many small manufacturers of aftermarket parts do not use such information on a regular basis and would find the cost of a subscription prohibitive. Making such information available on a per-use basis will clearly be more feasible for such companies, so long as the costs are kept reasonable. It would appear from the information in the draft that EPA will ensure that OEMs do not inflate the costs of providing information by including development costs, etc., which are not applicable to the cost basis for the information. In addition, the provision for information to be provided and/or consolidated through third parties should also be of benefit to the aftermarket. Keeping the OEM as the responsible party should they decide to contract out the task of providing the information required is also wise from an enforcement standpoint. SEMA views these requirements as being pro-competitive.
- The requirements for hyperlinking, open access (access to anyone, no special hardware or software, etc., needed), posting of user instructions, and Administrator approval for revisions are all beneficial in SEMA's view. While the requirement that other mediums (hardcopy, CD-ROM, etc.) be supported may cause some initial difficulty for companies lacking the appropriate hardware/software, SEMA supports the notion that a web-based delivery system is most efficient and cost-effective in the long run. SEMA also believes the OEMs and third parties will, by necessity, continue to make information available in other media for some time to minimize problems.

B) Web Site Performance

1) SEMA is supportive of EPA developing web site performance criteria. The notion of minimizing download times and the number of screens necessary to find the desired information are critical to user-friendliness. Similarly, minimum requirements in terms of server capacity and the need to conduct periodic performance assessments will also help ensure that information is

- available in an efficient manner when needed. The requirement for multiple search options (model, model year, etc.) will also greatly simplify the technician's ability to find the desired information in an efficient manner. SEMA also supports the prohibition of VIN as a prerequisite for site access.
- 2) One area of concern for SEMA is that of the rapid identification of the latest calibration. Clearly, this is meant to ensure the effectiveness of I/M testing by providing a means of verifying that the calibration which is installed in the vehicle is appropriate based on the VIN, type of vehicle, outstanding recalls, etc. This is fairly straight-forward for an unmodified vehicle because only OEM-generated calibrations need to be considered and a listing of those which are acceptable is relatively easy to generate and verify. However, a problem may arise when an aftermarket calibration is installed. If a recall or other mandated service action is issued after the aftermarket calibration is installed, erroneous information may be transmitted to the I/M lane in that only the revised OEM calibrations would be considered valid. This could be problematic not only in the sense that the consumer would be told they have failed the I/M test due to an improper calibration, but due to the potential for vehicle damage if they subsequently install the revised OEM calibration with aftermarket product(s) still installed on the vehicle. The most desirable solution for avoiding such problems would be for the OEM to share the calibration changes found in the revised OEM calibration with the aftermarket so they could be evaluated and/or implemented if necessary. aftermarket calibrations would then be revised as well, if necessary, and would then have the appropriate information listed on the I/M database. Unfortunately, SEMA cannot be hopeful of this happening due to the past reluctance of the OEMs to share such information. As an alternative, SEMA suggests that once a non-OEM calibration has been approved, it remain as an acceptable calibration even if a revised OEM calibration is generated. This will ensure there are no unnecessary I/M failures for owners of modified vehicles and will also prevent the installation of a potentially damaging revised OEM calibration in a modified vehicle. SEMA recognizes this may theoretically result in greater emissions than if the non-OEM calibration could be updated with the OEM revisions. However, we believe this effect, if real, would be so small as to be negligible in light of the small percentage of vehicles which are modified. Furthermore, the potential for consumer dissatisfaction and potential vehicle damage are very real and should thus be avoided. SEMA would certainly be willing to work with EPA and the OEMs to try to resolve this issue via the exchange of the revised OEM data.

C) Web Site Assessment Option

1) SEMA supports the option of using web site assessments by third parties. While recognizing that many of the parameters to be evaluated must still be defined, as must what constitutes acceptable performance, the benefit of objective oversight is noteworthy. In particular, the potential for user complaints to be made public and be the basis for potential enforcement

actions would seem to be strong motivation for performance levels to be kept high. While the OEMs clearly have an interest in ensuring acceptable performance of their web sites, the addition of an objective third party can help ensure such is the case. SEMA does not believe the costs associated with employing such an assessment mechanism would be any higher than if such assessments were to be conducted by the OEMs internally. In addition, a third party's exposure to multiple clients may help to generate more effective solutions when and if performance problems do arise. SEMA agrees that the conditions of such remedies must be acceptable to the OEM in question, yet we are also confident that any measures which may be proposed by a third party are likely to be more consistent with industry practices than those which may be forwarded by an individual OEM.

D) Training via Satellite and Internet

SEMA is very supportive of making training courses available via satellite and/or the Internet. This will save many aftermarket companies considerable expense in terms of travel and lost time. While one week advance notice may be acceptable in some cases, SEMA believes there is little, if any, reason why more notice could not be possible. At least two weeks should be required to ensure maximum scheduling flexibility and availability. Surely the OEMs or third parties which will be providing the training will have finalized their internal schedules prior to this. SEMA does not believe there should be any significant difference in whether the training is provided by the OEMs directly or via a third party, provided the curriculum/content and training tools/equipment used are comparable. The potential need to purchase such equipment is a further argument for greater advanced notice.

E) Definition of Emission-Related

1) In terms of service information, SEMA supports EPA's desire to clarify and broaden the definition of what is "emission-related." One area of particular concern is that of multiplexing. SEMA is concerned that vehicle manufacturers may desire to withhold information on how information is sent between modules on a multiplexed bus. This would, in effect, be a de facto form of encryption which would be very anti-competitive for the aftermarket. By not having access to this information, it would be impossible, in many cases, to effect proper repairs and/or properly diagnose indicated faults. Aftermarket parts manufacturers would be especially burdened in their attempts to ensure all required OBD monitors are functioning properly prior to an emission test. Should a monitor not set properly, the ability to reverseengineer the cause for such a condition would be compromised, as would the ability to achieve emission compliance. Clearly, this is not in the best interests of the consumer, nor the aftermarket. Similarly, the information needed for starting the vehicle when it is equipped with an "immobilizer" system or for reprogramming an ECU would have the same effect. SEMA thus supports EPA's proposal to include such information in the definition of "emission-related" since this information is needed to properly diagnose and repairs vehicles equipped with such systems. Since only a few examples were listed in the draft, SEMA would like to participate in whatever discussions may be held in the future to define the information included.

F) Reprogramming

1) SEMA enthusiastically supports the concept of a PC-based universal/"passthrough" reprogramming requirement. We believe this will help ensure the viability of the aftermarket repair industry as well as that of the aftermarket parts manufacturers. By mandating a universal architecture and software format, EPA will spare many small businesses the expense of purchasing a number of different tools for each vehicle make they intend to work on. Furthermore, a simplified reprogramming interface will aid in making the installation of an OEM or a non-OEM calibration transparent to the user, thus reducing the possibility of installing an incorrect calibration. While mandating a common hardware interface is clearly desirable, a standardized software interface is also needed to ensure maximum effectiveness. SEMA must again stress that EPA ensure there is provision for aftermarket companies which generate non-OEM calibrations to have such calibrations be compatible with both the software and hardware which will be used for reprogramming. This requires that such aftermarket companies not only be able to format their calibrations in a manner compatible with the system which EPA is proposing but that these calibrations be required to be stored in memory and distributed in the same manner as the OEM calibrations they are based on. A "Black Box" approach to reprogramming will surely facilitate this, however additional language is necessary in this regulation to ensure the transparent delivery and installation of non-OEM calibrations to the end user. SEMA will gladly work with EPA and others to resolve this matter.

G) Generic and Enhanced Information

Consistent with our previous comments on the "Definition of Emission-Related" and earlier comments on the type of information needed by the aftermarket, SEMA supports EPA's position on the inclusion of both generic and enhanced information in this rule. As previously stated, access to data stream information is critical for proper diagnosis and service of modern vehicles. This information must be readily available to the independent technician without the need for specialized/proprietary tools even if such information is found on a multiplexed bus. Similarly, the capability for bidirectional control is necessary not only for many diagnosis/repair procedures to be performed, but also for the development of aftermarket parts. Clearly, each of these capabilities would be of little value unless supporting information such as operating logic, performance limits and specifications under various conditions are included along with these

capabilities. The technician must have the information necessary for a complete understanding of the vehicle's systems such that sensors and parameters may be monitored (and actuators may be controlled) in the course of diagnosis and service. The ability for the aftermarket to perform all required service functions and properly interpret their results is critical.

2) SEMA also supports EPA's proposal to require that all OEM-specific tools be made available for sale to the aftermarket. Clearly, this must be done in a timely and cost-effective manner and thus SEMA supports the 30 day and "decontenting" aspects of the EPA proposal. With regard to the latter, SEMA assumes that the broadened definition of "emission-related" will minimize those systems which may be omitted from the OEM tool in versions which it will sell to the aftermarket. While SEMA agrees there is no need for the aftermarket to incur additional cost for non-emissions diagnostic/service capabilities, we are also concerned that some desirable functions may be deleted. Hopefully, market forces will prevent this, as will the possibility for third parties to produce similar tools. SEMA is confident the EPA will work to ensure all functions required for diagnosis and repair of emission-related systems will be made available in the tools marketed to the aftermarket. While issues such as product support, the clarity of the technician interface, user-friendliness, etc., must also be defined in such a way as to ensure these tools can be used in an effective and efficient manner, SEMA believes there is sufficient motivation from all concerned to facilitate this. SEMA believes keeping purchase costs reasonable should be the highest priority.

H) Other

- SEMA fully supports the EPA's proposed requirement that the OEMs make specialized diagnostic tools and the information needed to use and manufacture them available to third parties. This will help ensure the equipment needed for proper diagnosis and service is available at competitive prices. Furthermore, SEMA believes this requirement should also include items such as the connectors used on the vehicle ECUs and wiring harnesses so that manufacturers of aftermarket products may ensure compatibility with the OEM components. One example of the need for such information would be the design of "break-out boxes" and other similar means for monitoring various signals/parameters in realtime while the vehicle is operating. Whether the design information for such connectors is made available or whether such components can be purchased directly from the OEM supplier (at reasonable cost/in a timely manner, of course) is less important than such components becoming available to the aftermarket.
- 2) The requirement that OEMs which own 50% or more of another OEM assume responsibility for the compliance of the latter with regard to this rule is beneficial, in SEMA's view. In the past, many smaller OEMs have been reluctant to provide the aftermarket with necessary equipment and information for various reasons. By placing the liability for such actions on

the parent company, SEMA believes there will be less of a tendency for such resistance since the potential impact of an enforcement action will be much greater. SEMA thus supports this requirement as a means of helping to ensure a competitive marketplace which provides greater product diversity.

While SEMA's previous comments with regard to multiplexing will suffice relative to the eventual inclusion of the CAN protocol in these regulations, SEMA also supports the eventual inclusion of heavy duty vehicles. Since the various regulatory requirements relative to emissions of such vehicles continue to evolve and become more stringent, it is logical to assume these vehicles will adopt technologies similar to those found on light duty vehicles. This trend will thus exacerbate the need for similar information availability. Since the heavy duty sector will continue to contribute an increasingly larger portion of mobile source emissions, it is only appropriate that the information, equipment and training necessary to keep these vehicles emitting at as low a level as is possible be made available to the aftermarket.

SEMA is looking forward to the opportunity to work with the EPA and others to further define the requirements contained in these regulations. If there should be any questions regarding the comments provided, please do not hesitate to contact either party below.

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